

**DISTRIBUTED CLASSIFICATION OF VERTICALLY PARTITIONED DATA**

**ABSTRACT**

Each individual classifier is based on the partial view of the data that is locally available. For the decision made by the classifiers to be consistent, the data sets available to the classifiers are sampled from the same (fixed though unknown) distribution. A test pattern is assumed to be observable across the classifiers. A combined classification is achieved based upon the posterior probabilities computed by the individual classifiers. The posterior is computed for a test sample based on the posteriors provided by a subset of consistent classifiers.